

CLAIMS

What is claimed is:

1. An information storage medium for use with a recording and/or reproducing apparatus having an ENAV buffer, the medium comprising:

an ENAV file containing ENAV data; and

ENAV buffer configuration information for use by the apparatus in allocating at least a portion of the ENAV buffer in which the ENAV file is to be loaded to be an updateable markup area.

2. The information storage medium of claim 1, further comprising:

a plurality of ENAV files including the ENAV file, and

a loading information file including the ENAV buffer configuration information and which includes a name and a location information of a predetermined one of the plurality of ENAV files to be read by the apparatus in advance of the remaining ones of the plurality of ENAV files and which is used by the apparatus to determine an order for buffering the plurality of ENAV files into the ENAV buffer.

3. The information storage medium of claim 1, further comprising a loading information file having a memory element including the ENAV buffer configuration information, wherein the memory element is used by the apparatus to distinguish whether the ENAV file is one of an updateable ENAV file to be loaded in the updateable markup area and another type of ENAV file which is to be loaded in another area of the ENAV buffer other than the updateable markup area.

4. The information storage medium of claim 1, further comprising a loading information file having a memory element having an attribute, wherein:

the attribute of the memory element comprises as the ENAV buffer configuration information a memory name and a size of the ENAV file, and

the memory name and size are used by the apparatus to distinguish whether the ENAV file is to be loaded in the updateable markup area corresponding to the memory name and another type of ENAV file which is to be loaded in another area of the ENAV buffer other than the updateable markup area which does not correspond to the memory name.

5. The information storage medium of claim 1, further comprising:
a loading information file including the ENAV buffer configuration file,
a startup file linked to the loading information file,
a directory including the loading information file and the ENAV file,
wherein, in order to read the ENAV buffer configuration information in the loading information file, the apparatus reads the startup file included in the directory to be linked to the loading information file.

6. The information storage medium of claim 1, further comprising an AV file containing AV data, wherein the ENAV file is a file used by the apparatus for reproducing the AV file with the buffered ENAV file in an interactive mode.

7. The information storage medium of claim 6, wherein the AV file is created according to a DVD-Video format, and the ENAV file includes a markup document created with a markup language and which is interpreted by the apparatus for reproducing the AV file with the ENAV file in the interactive mode.

8. The information storage medium of claim 6, further comprising:
an AV directory including the AV file, and
an ENAV directory other than the AV directory and which includes the ENAV file and a file containing the ENAV buffer configuration information.

9. The information storage medium of claim 1, wherein the ENAV buffer configuration information includes location information used by the apparatus for loading another ENAV file from another information storage medium.

10. The information storage medium of claim 9, wherein the location information comprises a website at which the another information storage medium is accessible from the apparatus.

11. The information storage medium of claim 3, wherein:
the memory element indicates

a location of another ENAV file as being on another storage medium other than the information storage medium from which the another ENAV data is to be read by the apparatus, and

a location of the ENAV file as being on the information storage medium from which the ENAV data is to be read by the apparatus, and

using the memory element, the apparatus:

loads one of the ENAV files determined to be an updateable markup file to be buffered into the allocated updateable markup area of the ENAV buffer, and

loads the other one of the ENAV files determined not to be an updateable markup file into another portion of the ENAV buffer other than the updateable markup area and which is not allocated for the updateable markup file.

12. The information storage medium of claim of claim 11, wherein the another storage medium comprises a server connected to the ENAV buffer.

13. An information storage medium for use with a recording and/or reproducing apparatus in an interactive mode and which includes a buffer, the medium comprising:

first data to be reproduced by the apparatus with an interactive file in the interactive mode; and

allocation information used by the apparatus to allocate a portion of the buffer to be reserved for an interactive type of the interactive file prior to the interactive file being loaded.

14. The information storage medium of claim 13, further comprising identification information which is detected by the apparatus to determine the interactive file to be read and which is used by the apparatus to distinguish between the updateable type of the interactive file which is to be buffered in the allocated portion and another type of the interactive file to be buffered in another area of the buffer.

15. The information storage medium of claim 13, wherein the allocation information comprises an attribute including a name of the allocated portion and a pre-selected size, and the apparatus allocates the size of the allocated area for the interactive file to be reproduced if the interactive file is associated with the name.

16. The information storage medium of claim 13, wherein the allocation information indicates a size of the allocated portion.

17. The information storage medium of claim 13, further comprising location information which is used by the apparatus to locate the interactive file to be reproduced, and the apparatus uses the read allocation information to detect from the located interactive file a size of the buffer to reserve as the allocated portion.

18. The information storage medium of claim 17, wherein the size of the allocated portion is detected by the apparatus from another information storage medium referenced by the location information.

19. The information storage medium of claim 18, wherein the another information storage medium is on a server external to the apparatus.

20. The information storage medium of claim 13, further comprising order information indicating an order of a plurality of interactive files including the interactive file to be reproduced, and the apparatus buffers the interactive file in the buffer using the order.

21. The information storage medium of claim 13, further comprising

location information of the interactive file to be reproduced and which the apparatus uses to locate and distinguish between a location on one of the information storage medium and on another storage medium other than the storage medium, and

buffer information for the interactive file to be reproduced and which the apparatus uses to distinguish whether the interactive file to is be buffered in one of the allocated portion of the buffer and another portion of the buffer not allocated for the updateable interactive file.

22. The information storage medium of claim 13, wherein:

the first data includes an image, and

the apparatus interprets the interactive file to display the image from the first data in a first portion of a display and to display the interactive file as an interactive display in a second portion of the display other than the first portion.

23. The information storage medium of claim 22, wherein the first data includes audio data used by the apparatus to be reproduced through an audio output as the image is reproduced in the interactive mode.

24. The information storage medium of claim 22, wherein the first data includes a video comprising the image.

25. The information storage medium of claim 13, wherein the first data includes audio data to be reproduced through an audio output as the interactive file is reproduced.